

ABSTRACT OF THE DISCLOSURE

An effective orthodontic treatment is determined by storing an original position model of a patient's teeth. The patient's teeth are then displayed according to the original position model, and appliances are selected according to a proposed orthodontic treatment. A final position model of the patient's teeth is also stored, and the selected appliances are displayed based upon the final position model. A finite element analysis is performed based on the proposed orthodontic treatment and on a movement of the patient's teeth from the final position to the original position in order to determine stresses, strains, forces, and /or moments on the appliances and on the patient's teeth and bone. If the stresses, strains, forces, and /or moments are not optimized, a new orthodontic treatment is proposed and the process is repeated.